FIG. 1A
(PRIOR ART)

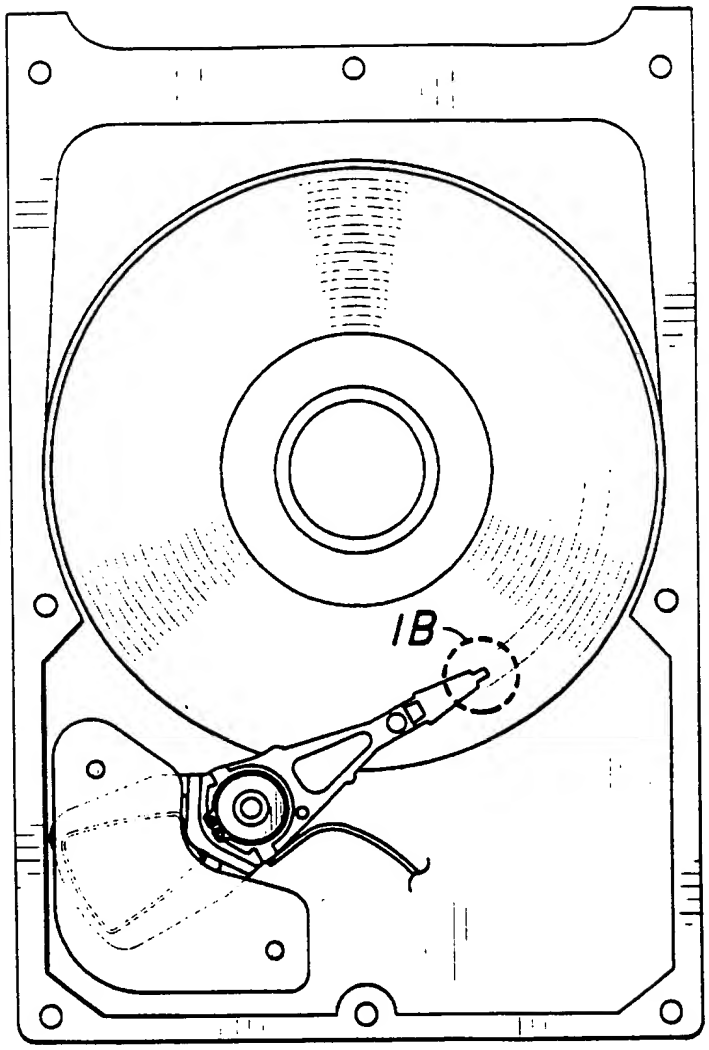


FIG. 1B
(PRIOR ART)

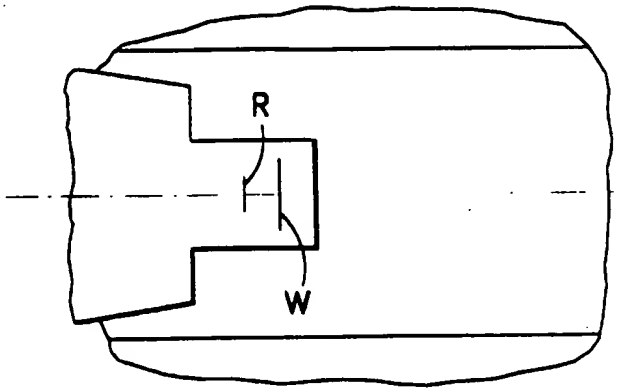


FIG. 2A
(PRIOR ART)

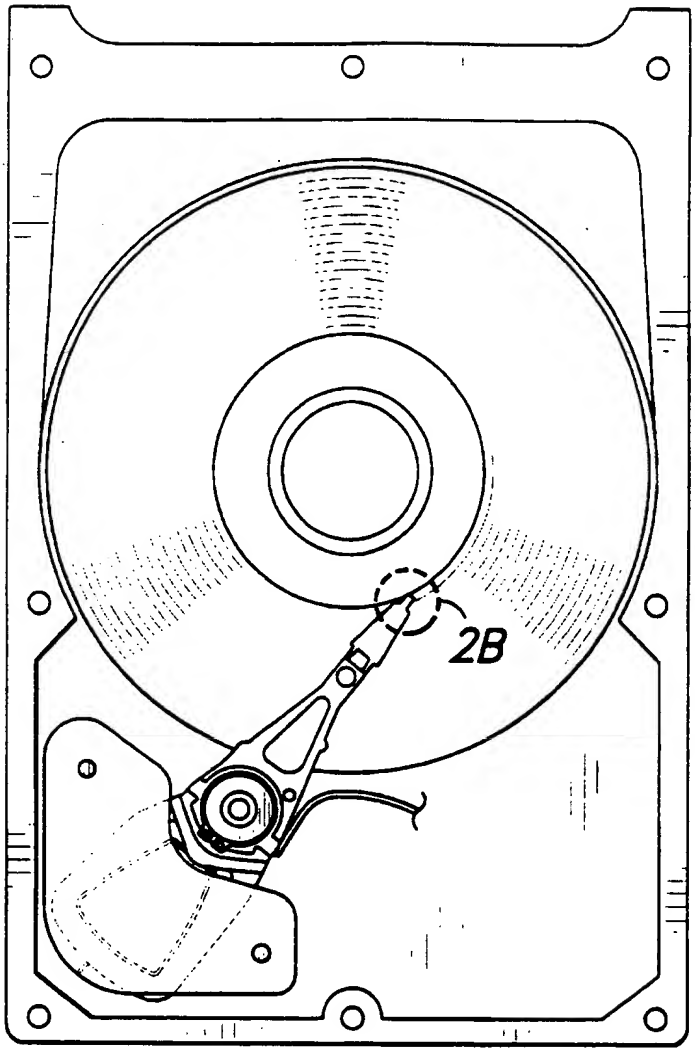


FIG. 2B
(PRIOR ART)

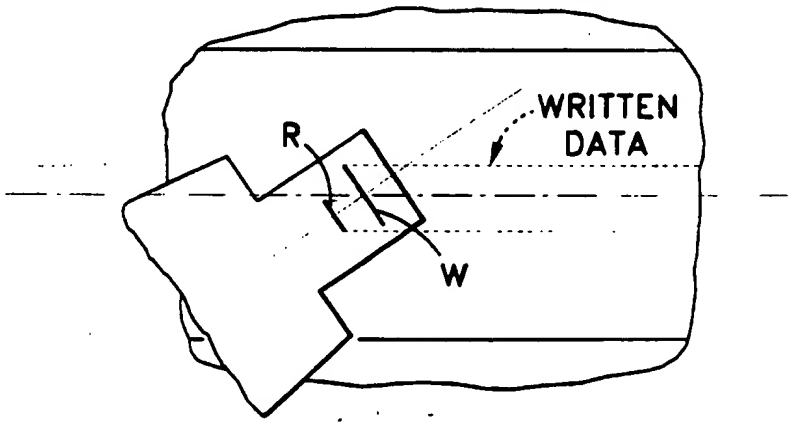


FIG. 3

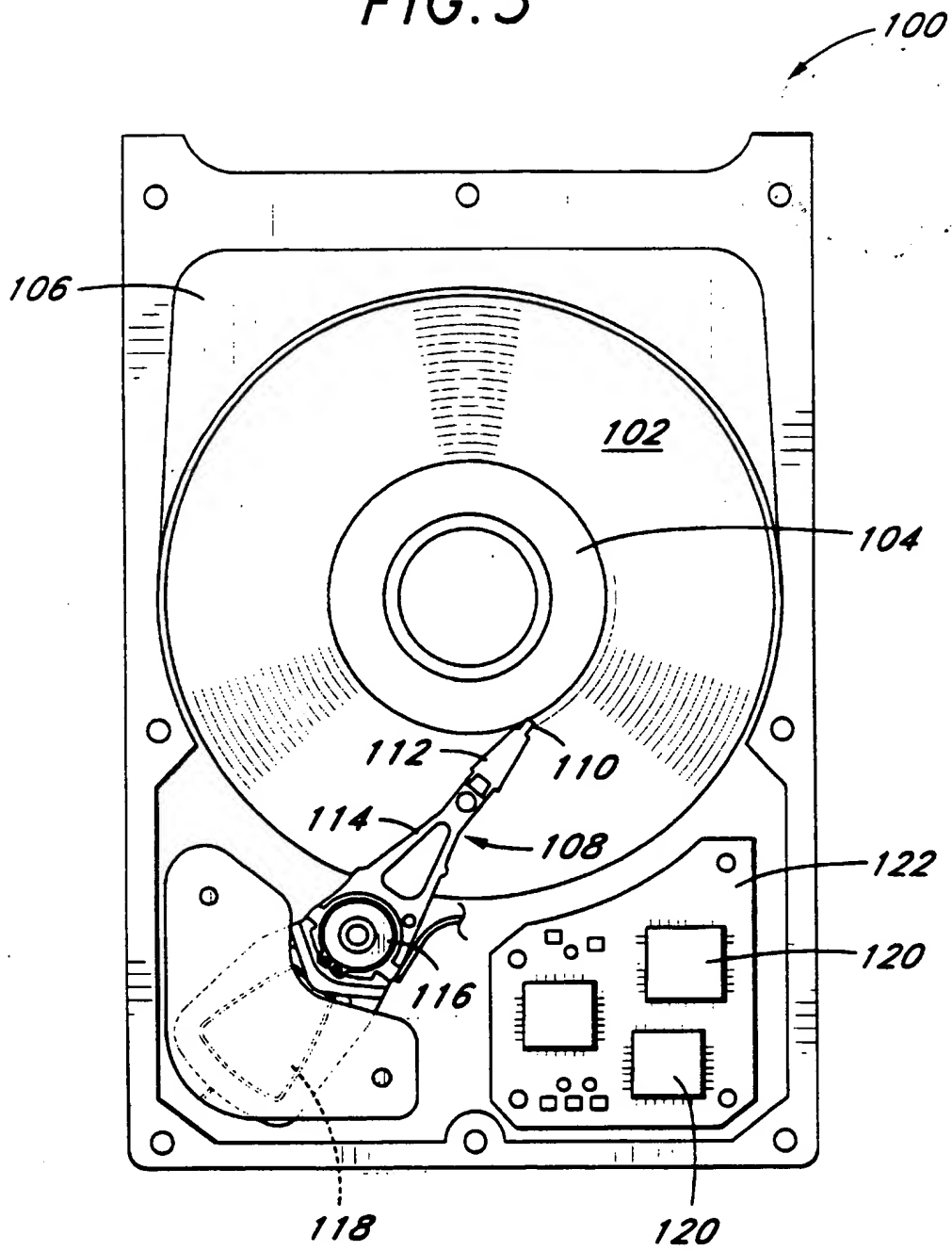
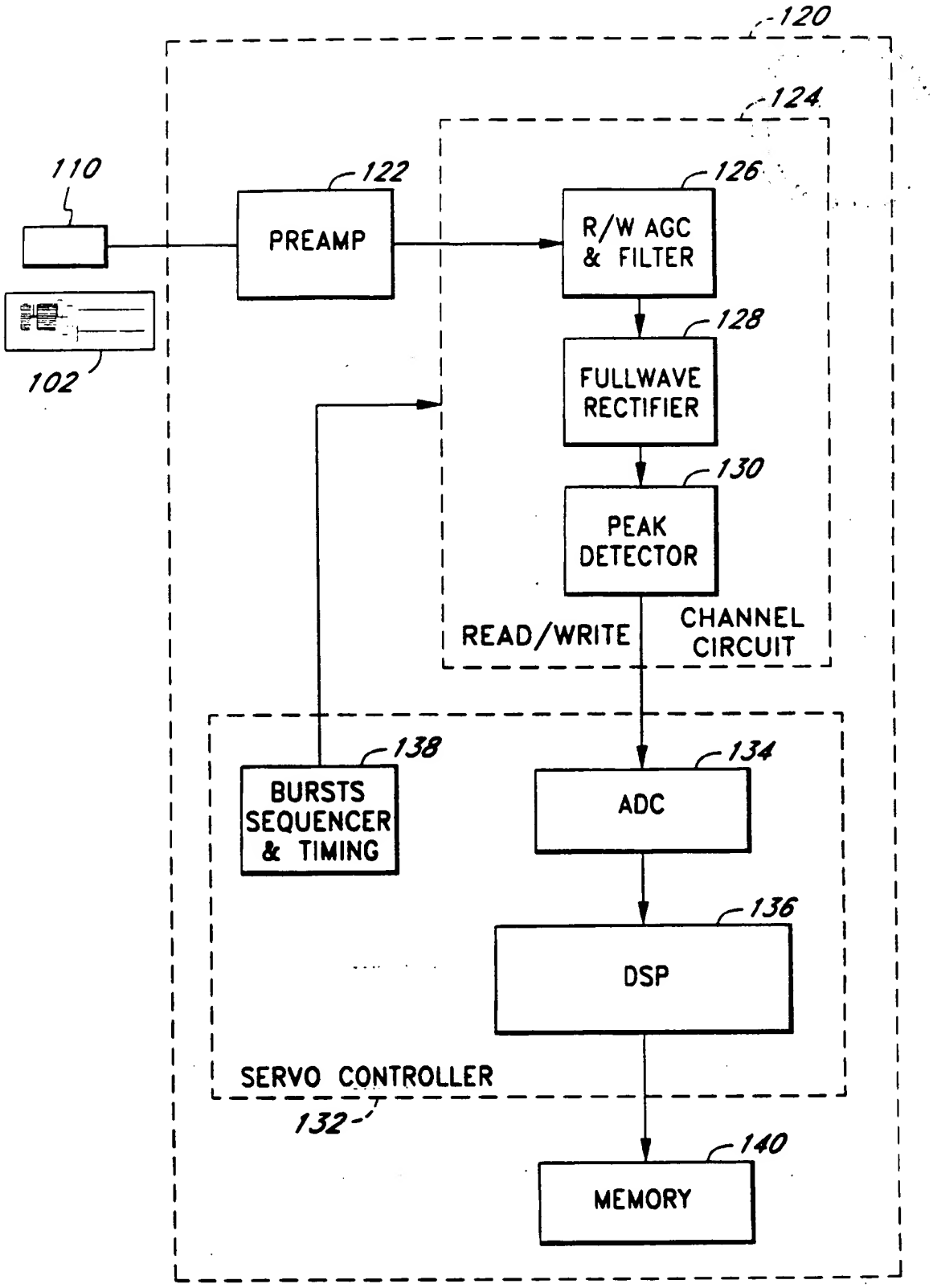


FIG. 4


120
124
110
122
126
PREAMP
R/W AGC & FILTER
128
FULLWAVE RECTIFIER
130
PEAK DETECTOR
READ/WRITE CHANNEL CIRCUIT
102
138
134
BURSTS SEQUENCER & TIMING
ADC
136
DSP
SERVO CONTROLLER
132
140
MEMORY

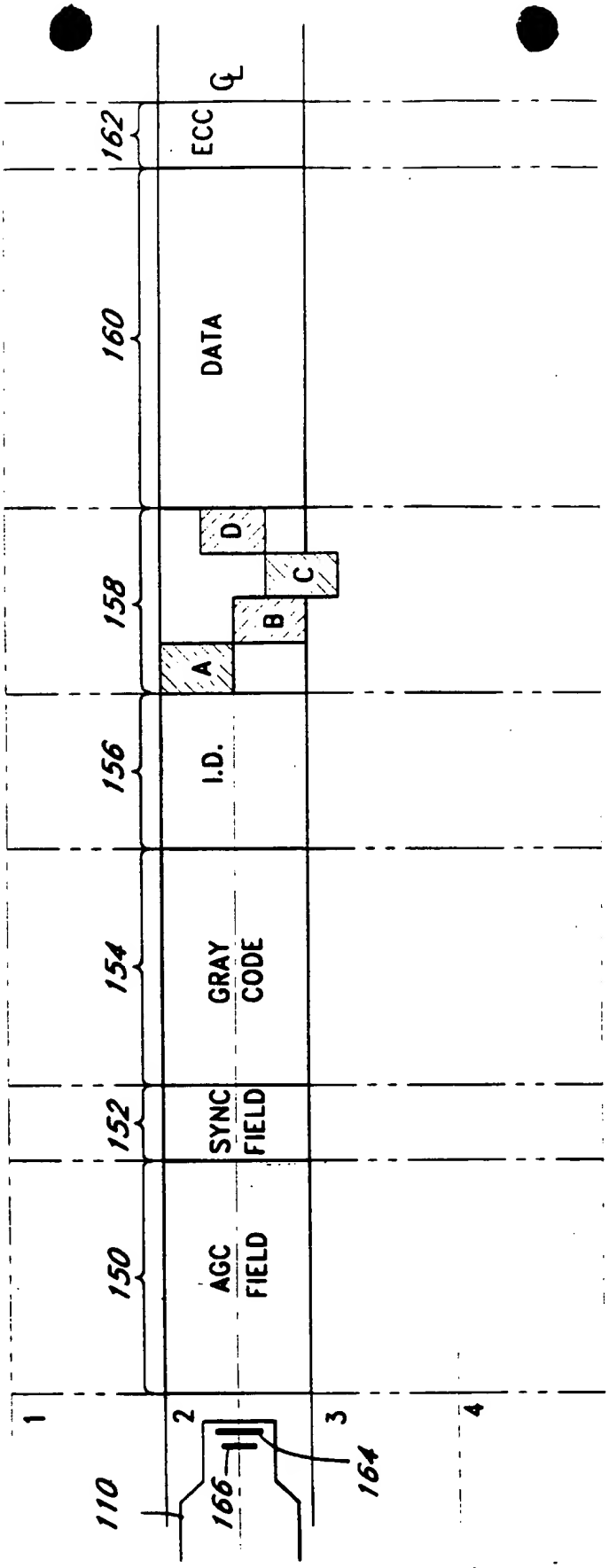

ECC
DATA
I.D.
GRAY CODE
SYNC FIELD
AGC FIELD
A
B
C
D
1
2
3
4
110
162
160
158
156
154
152
150
164
166

FIG. 5

FIG. 6A

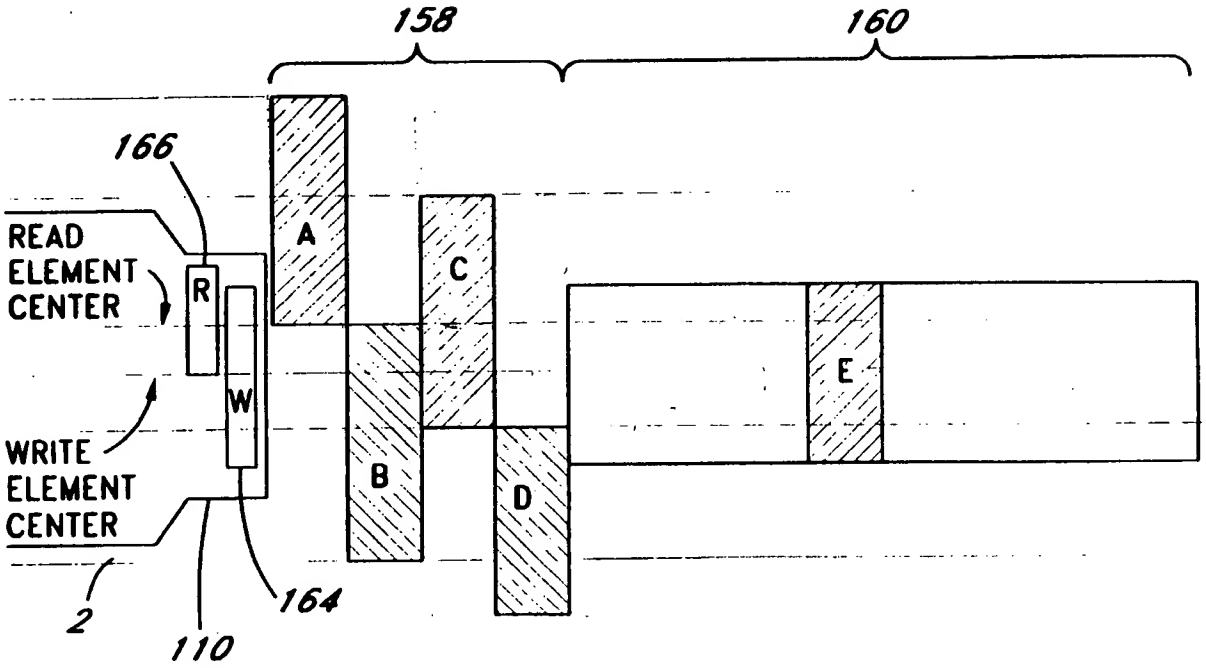

158
160
166
READ
ELEMENT
CENTER
R
W
WRITE
ELEMENT
CENTER
A
B
C
D
E
2
110
164

FIG. 6B

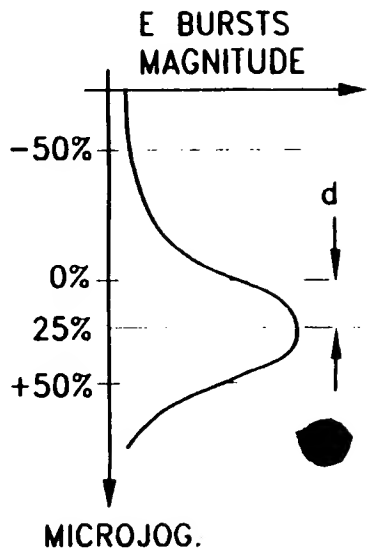

E BURSTS
MAGNITUDE
-50%
0%
25%
+50%
d
MICROJOG.

FIG. 7A

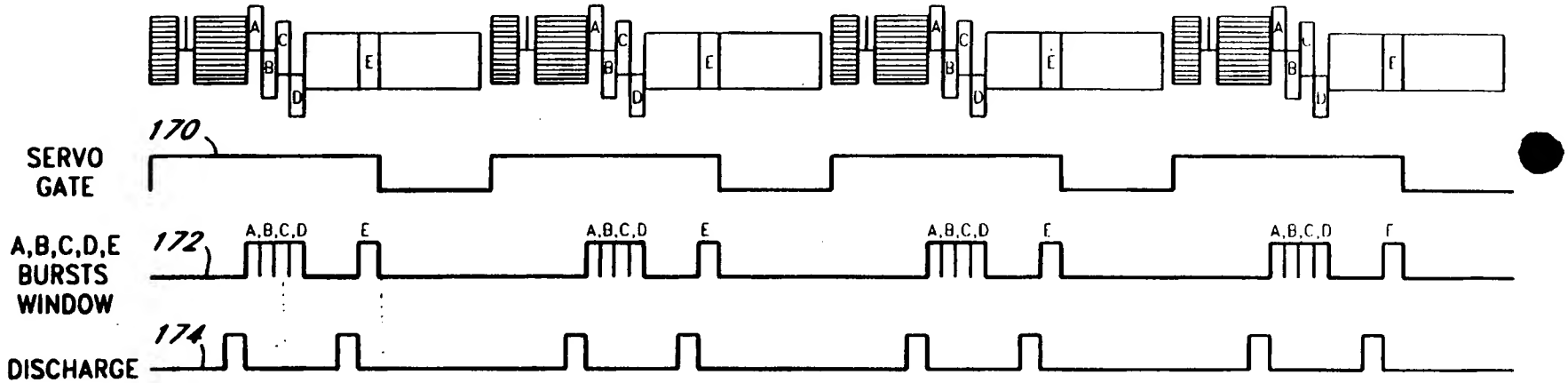

A
B
C
D
E
F
170
SERVO GATE
A,B,C,D,E BURSTS WINDOW
172
A,B,C,D
E
F
174
DISCHARGE

FIG. 8

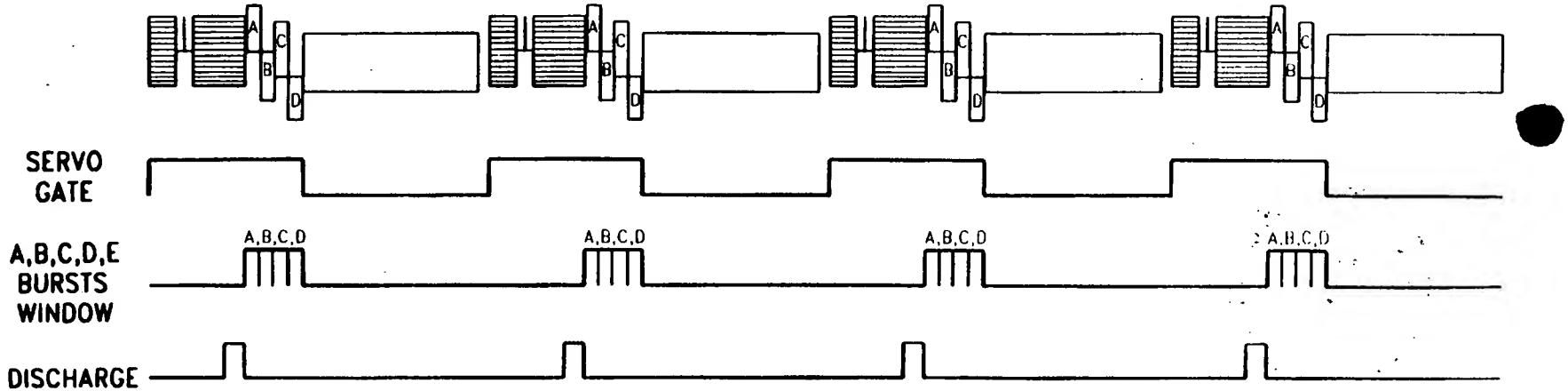
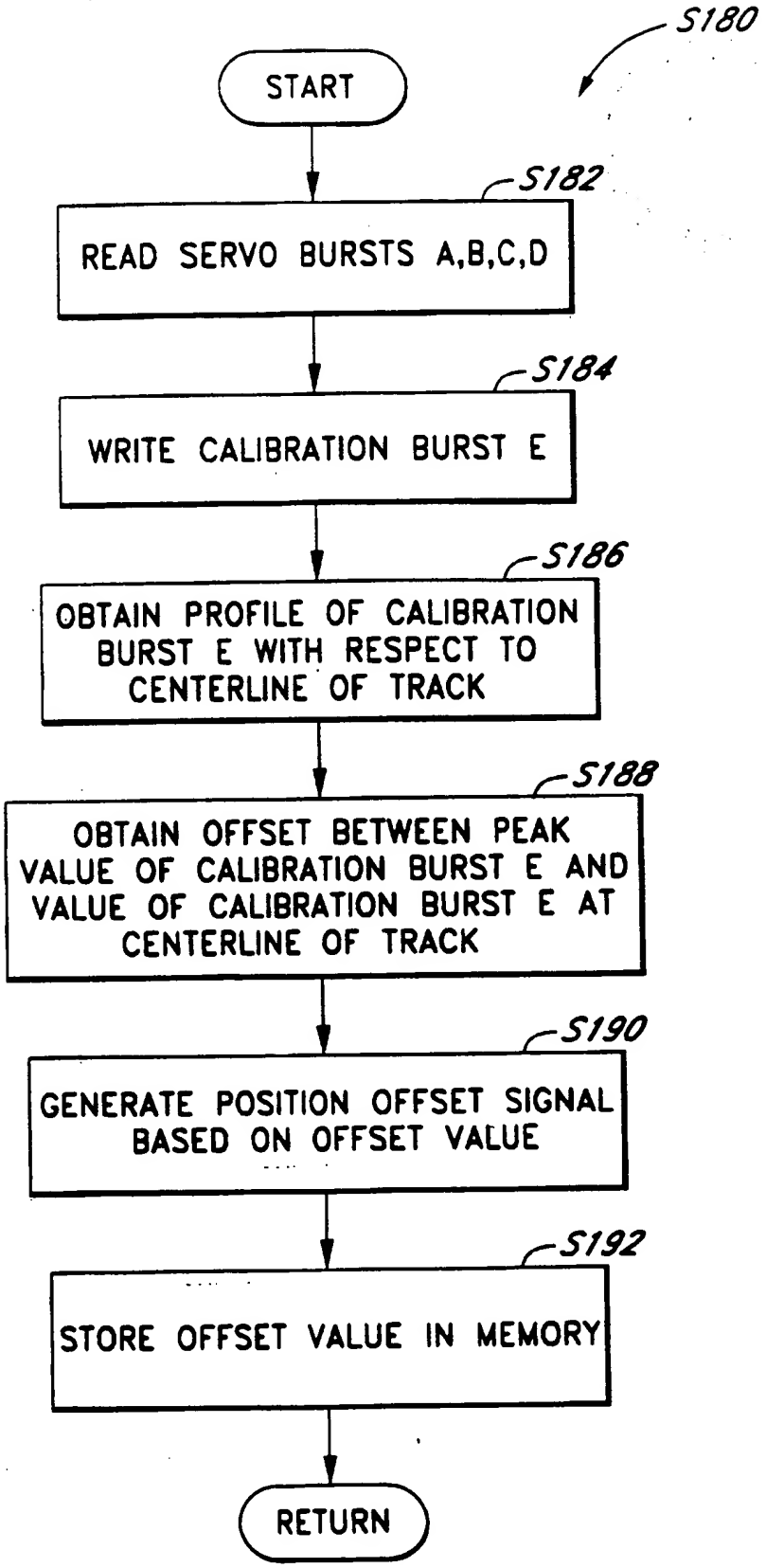

A
B
C
D
SERVO GATE
A,B,C,D,E BURSTS WINDOW
A,B,C,D
DISCHARGE

FIG. 7B


S180
START
S182
READ SERVO BURSTS A,B,C,D
S184
WRITE CALIBRATION BURST E
S186
OBTAIN PROFILE OF CALIBRATION BURST E WITH RESPECT TO CENTERLINE OF TRACK
S188
OBTAIN OFFSET BETWEEN PEAK VALUE OF CALIBRATION BURST E AND VALUE OF CALIBRATION BURST E AT CENTERLINE OF TRACK
S190
GENERATE POSITION OFFSET SIGNAL BASED ON OFFSET VALUE
S192
STORE OFFSET VALUE IN MEMORY
RETURN

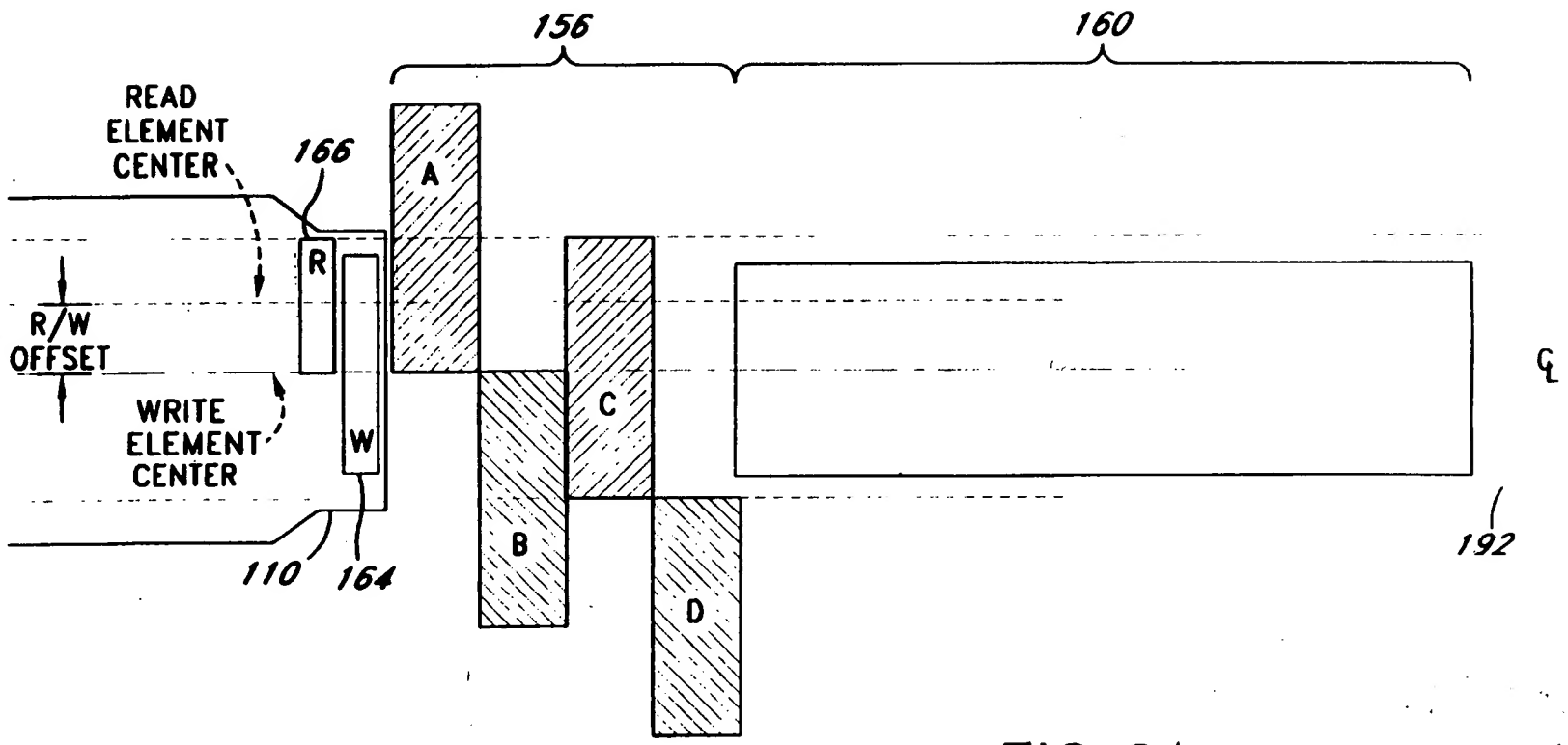
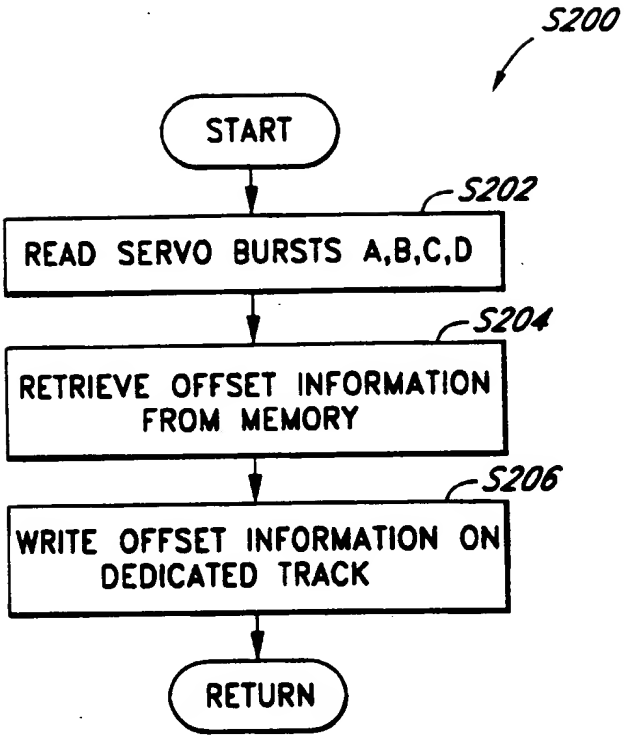

156
160
READ
ELEMENT
CENTER
166
A
R
R/W
OFFSET
WRITE
ELEMENT
CENTER
W
C
B
D
110
164
192
℄

FIG. 9A

FIG. 9B


S200
START
S202
READ SERVO BURSTS A,B,C,D
S204
RETRIEVE OFFSET INFORMATION FROM MEMORY
S206
WRITE OFFSET INFORMATION ON DEDICATED TRACK
RETURN

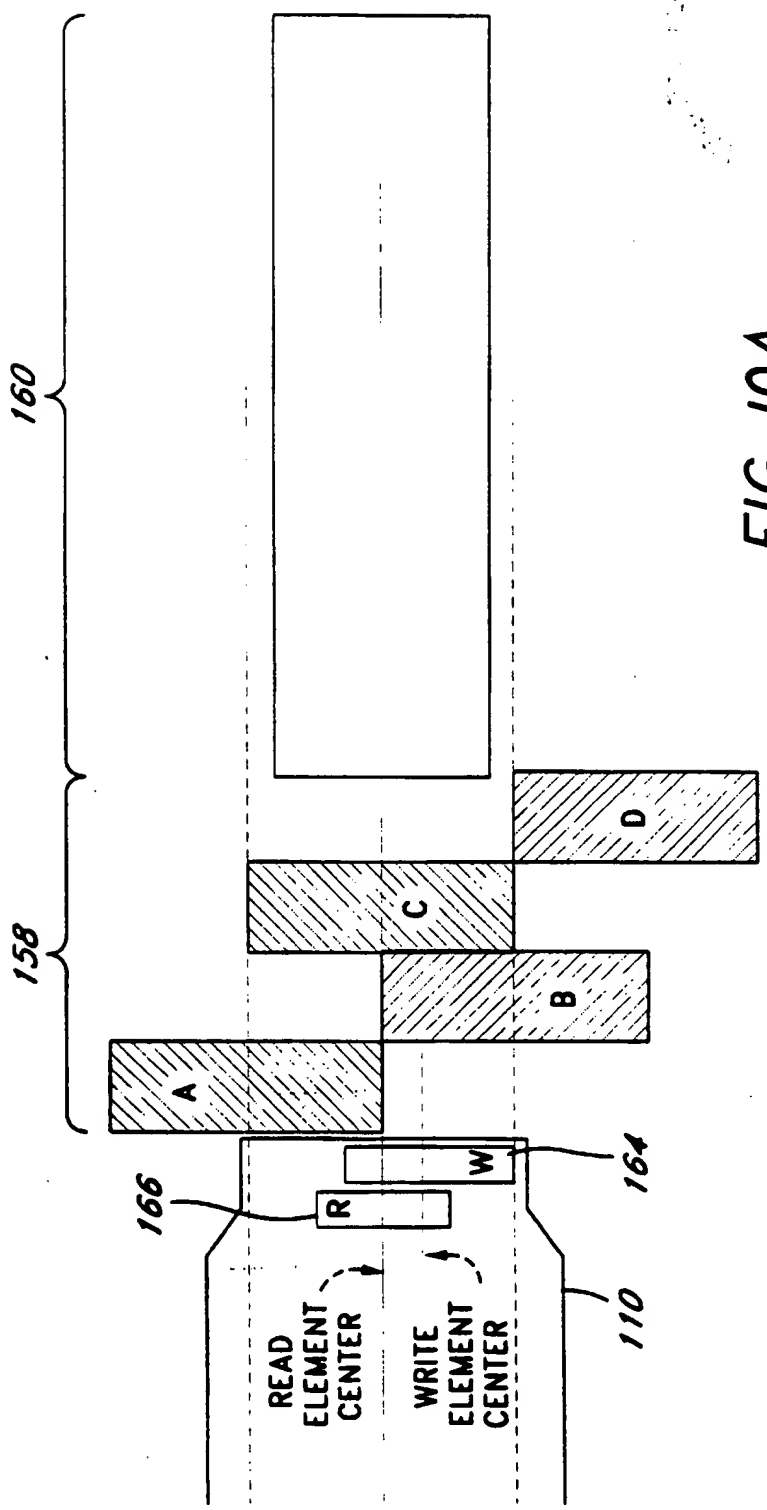
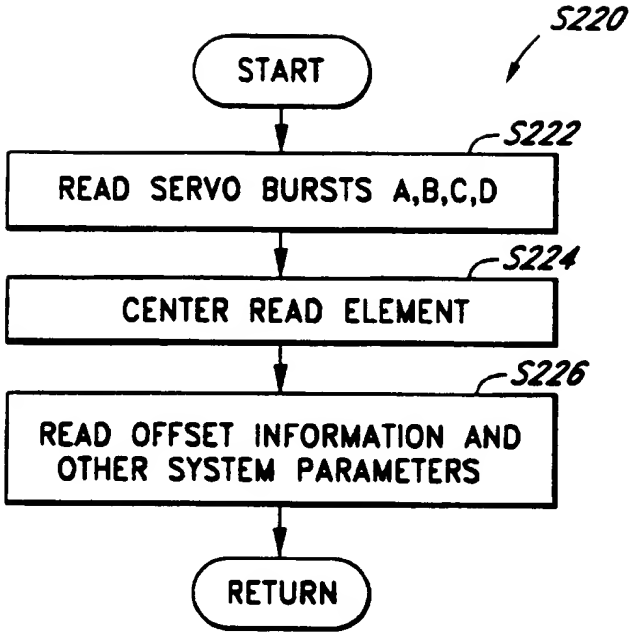

160
158
A
B
C
D
W
R
164
166
110
READ ELEMENT CENTER
WRITE ELEMENT CENTER

FIG. 10A

FIG. 10B


S220
START
S222
READ SERVO BURSTS A,B,C,D
S224
CENTER READ ELEMENT
S226
READ OFFSET INFORMATION AND OTHER SYSTEM PARAMETERS
RETURN